

6

# REPORT

OF THE

BOARD OF COMMISSIONERS

OF THE

SECOND GEOLOGICAL SURVEY OF PENNSYLVANIA;

FOR 1878.

---

*To the Honorable the Senate and House of Representatives of Pennsylvania.*

The Board of Commissioners of the Second Geological Survey of Pennsylvania respectfully present the following report:

The original plan of the Survey has been continued without material modifications since our last report.

During the past two years there have been several parties engaged in the field work during the summer, and in office work preparing reports and maps during the winter.

The work thus prosecuted may be stated as follows:

1. The continuation of the Survey of the Great Valley between the Delaware and Schuylkill.

2. The Survey of the south-eastern portion of the State from Trenton to the boundary line of Delaware and Maryland.

3. The extension of the Survey of York and Adams counties eastward through Lancaster and Chester.

4. The Survey of Cumberland, Dauphin and Lebanon.
5. The Survey of the mass of the South Mountain near the Maryland line.
6. The Survey of Middle Pennsylvania in several subdivisions between the North Mountain and the Alleghenies.
7. Parties in the south-western portion of the State, Fayette, Westmoreland, Somerset, Allegheny, Indiana and Armstrong counties.
8. The Ohio border, Beaver, Butler and Lawrence counties.
9. The Oil Region and its borders.
10. The northern counties, McKean, Elk, Potter, Tioga, Bradford, Lycoming, Wyoming, Sullivan, Clinton and Centre.

This enumeration does not indicate the number of observers, for in some instances one observer has been employed in several districts, and in other instances, as the Oil regions, several observers have been engaged in one district. It only shows the order of doing the work.

Our practice has always been to use every available day for field work, and when this was stopped by the inclemency of the season, to employ the assistants in office work. In this manner we have been able to publish each year reports of the work done the preceding year, an achievement which is believed to have been seldom accomplished in the history of Geological Surveys.

The condition of the Survey at the close of the season of 1878 is as follows:

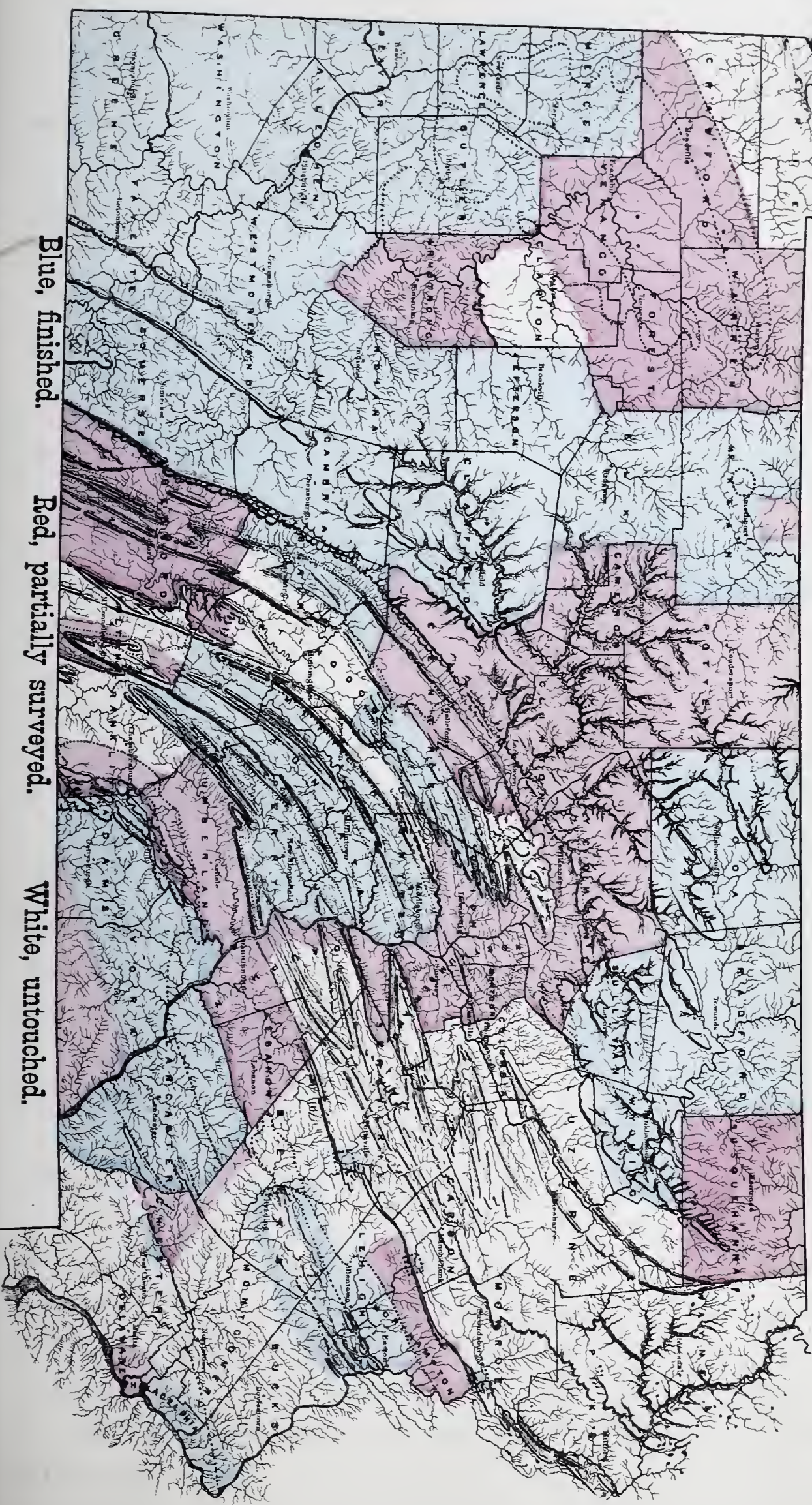
The following counties have been completely surveyed, and reports upon them published or prepared:—

Mercer, Lawrence, Beaver, Butler, Allegheny, Washington, Greene, Fayette, Westmoreland, Indiana, Jefferson, Clearfield, Cambria, Somerset, McKean, Potter, Tioga, Bradford, Wyoming, Sullivan, Juniata, Perry, Blair and Lancaster . . . 24.

The following have been partly surveyed:—  
Venango, Warren, Elk, Cameron, Lycoming, Armstrong,



Map of Pennsylvania, showing the Progress of the Geological Survey, up to December 31, 1878.







Digitized by the Internet Archive  
in 2018 with funding from

This project is made possible by a grant from the Institute of Museum and Library Services as administered by the Pennsylvania Department of Education through the Office of Commonwealth Libraries

Bedford, Fulton, Huntingdon, Centre, Clinton, Union, Snyder, Northumberland, Montour, Mifflin, Juniata, Franklin, Adams, York, Cumberland, Dauphin, Lebanon, Berks, Lehigh, Northampton, Chester, Montgomery, Bucks, Delaware and Philadelphia . . . . . 31.

The following are untouched:—

Erie, Crawford, Clarion, Forest, Cameron, Susquehanna, Wayne, Pike, Luzerne, Munroe, Carbon, Schuylkill and Delaware . . . . . 13.

The appropriation for the Survey expires on the 31st day of December, 1879. To complete the work in all parts of the State in that careful and comprehensive manner in which it has thus far been done in the districts above mentioned, will require two years more, the years 1880 and 1881.

We therefore request of your honorable bodies an appropriation of \$100,000, of which \$50,000 shall be expended during the year 1880, and \$50,000 during 1881. With this we feel assured that the Survey can be completed in a manner satisfactory and creditable to the State. Without this it will remain incomplete and unsatisfactory.

The Act organizing the Survey made it incumbent on the Commissioners to collect a Geological Library, and a Cabinet of Specimens. This has been begun, and it is evident that the collection will be large enough to fill a room at least 50x30 feet in plan, and 20 feet high.\* But we have no place to display either the Library or the Cabinet. Unless the State will follow the example of New York, and erect a building for this pur-

---

\* In a room of the above dimensions the specimens would be arranged in a series of shallow drawers or trays in cases, extending to a height of eight feet from the floor along the long sides, with galleries containing a like number of cases of trays. The middle of the room would be occupied by work tables, and glass show cases with shallow drawers under them. The short sides would be occupied by windows and book cases. This arrangement would accommodate nearly 100,000 specimens, but would not provide for work rooms and wall maps. The number of specimens and duplicates already collected is over 50,000, and the additions will probably be 10,000 annually during the continuance of the Survey.

pose, it is highly probable that the collections of the Second Survey, whose value is priceless, will encounter the fate of those of the First Survey, and be first stored in a garret, then in a Lunatic Asylum, and at last be dispersed without leaving a trace.

The Board therefore recommend an appropriation for the erection at Harrisburg of a building sufficiently large to display the collections of the Survey.

If, however, this should be deemed inexpedient, there is no doubt that the charge of the collection—without expense to the State—would be willingly assumed by the Academy of Natural Sciences in Philadelphia. The only difficulty in this case will be their want of space. But a grant by the State to assist the society in the proposed enlargement of their building, would obviate all difficulty, and not only secure a permanent location for the collection, but a provision for its care and maintenance.

All which is respectfully submitted.

By order of the Board.

JOHN F. HARTRANFT,

*Chairman.*